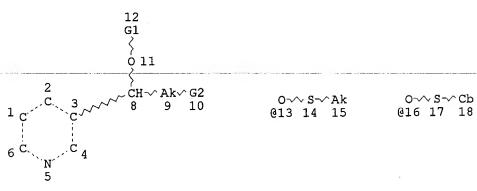
(FILE 'REGISTRY' ENTERED AT 10:17:29 ON 10 AUG 2004) G1 0-√ S-√ Cb 0-∕-> S-⁄-^ Ak 013 14 15 @16 17 18 0 11

VAR G1=CY/SI VAR G2=X/13/16 NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

L1

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 17

STEREO ATTRIBUTES: NONE L2 STR



VAR G1=CY/SI VAR G2=X/13/16 NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 17

STEREO ATTRIBUTES: NONE L3 STR

VAR G1=CY/SI VAR G2=X/13/16 NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 17

@13 14 15

0~ S~ Cb @16 17 18

VAR G1=CY/SI VAR G2=X/13/16 NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 17

STEREO ATTRIBUTES: NONE

L5 STR

12
G1
O11
8 CH Ak G2
9 10
2
C
6 N
5

O~~ S~~ Ak O~~ S~~ Cb @13 14 15 @16 17 18

12 ANSWERS

VAR G1=CY/SI VAR G2=X/13/16 NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 17

STEREO ATTRIBUTES: NONE

L6 12 SEA FILE=REGISTRY SSS FUL L1 OR L2 OR L3 OR L4 OR L5

100.0% PROCESSED 573179 ITERATIONS

SEARCH TIME: 00.00.12

FILE 'CAPLUS' ENTERED AT 11:43:04 ON 10 AUG 2004 16 S L6

L7 ANSWER 1 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2004:14394 CAPLUS

DOCUMENT NUMBER:

140:217793 ·

TITLE:

L7

Synthesis of versatile chiral N,P ligands derived from

pyridine and quinoline

AUTHOR(S):

Drury, William J., III; Zimmermann, Nicole; Keenan, Martine; Hayashi, Masahiko; Kaiser, Stefan; Goddard,

Richard; Pfaltz, Andreas

CORPORATE SOURCE:

Department of Chemistry, University of Basel, Basel,

Switz.

SOURCE:

Angewandte Chemie, International Edition (2004),

Volume Date 2003, 43(1), 70-74 CODEN: ACIEF5; ISSN: 1433-7851 Wiley-VCH Verlag GmbH & Co. KGaA

PUBLISHER: DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 140:217793

GI

Ι

Potent transition-metal complexes, e.g. I (BArF = tetrakis(3,5-bis(trifluoromethyl)phenyl)borate; R = Si(t-Bu)Me2, Si(iPr)3, Si(t-Bu)Ph2), for asym. catalysis are formed from readily accessible N,P ligands constructed from basic N-heteroaryl building blocks. Their simple assembly should not be misconstrued: they posses several handles by which to tune both steric and electronic parameters. The potential of these ligands is demonstrated by the high levels of enantioselection they induce in such divergent processes as asym. hydrogenation and the Heck reaction. The crystal structures of I were determined

IT 664994-92-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis of versatile chiral iminophosphine ligands derived from pyridine and quinoline and their cationic iridium complexes for asym. catalysis)

RN 664994-92-7 CAPLUS

CN 2-Quinolineethanol, β -[[(1,1-dimethylethyl)dimethylsilyl]oxy]-, 4-methylbenzenesulfonate (ester), (β R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

REFERENCE COUNT:

17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2003:696892 CAPLUS

DOCUMENT NUMBER:

139:219360

TITLE:

Crystal forms of (R)-2-(2-(4-oxazol-4-

ylphenoxy) ethylamino) -1-pyridin-3-ylethanol

INVENTOR(S): Krzyzaniak, Joseph Francis; Lafontaine, Jennifer Anne

PATENT ASSIGNEE(S): Pfizer Products Inc., USA SOURCE: PCT Int. Appl., 35 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| | PATENT | No. | | | KIN | D | DATE | |] | APPL: | ICAT: | ION I | NO. | | D2 | ATE | |
|--------------|---|---------------|----------------|-------|-----------|-------------|-------|-------|-------------|--------|--------------|-------|--------------|--------------|-------|-------------|---------|
| | WO 200 | 20725 | 73 | | <u></u> - | _ | 2003 | 0904 | 1 | | | | | | 20 | 0030 | 217 |
| | WO 200 | 730723 AF: | AG, | AT. | AM. | AΤ. | AU. | AZ. | BA. | BB, | BG, | BR, | BY, | ΒZ, | CA, | CH, | CN, |
| | ٧٧ . | CO. | CR, | CU. | CZ. | DE. | DK. | DM, | DZ, | EC, | EE, | ES, | FI, | GB, | GD, | GE, | GH, |
| | | GM. | HR, | HU. | ID. | IL, | IN. | IS, | JP, | KE, | KG, | KP, | KR, | KZ, | LC, | LK, | LR, |
| | | LS. | LT, | T.U. | LV. | MA. | MD. | MG. | MK, | MN, | MW, | MX, | MZ, | NO, | ΝZ, | OM, | PH, |
| | | PL. | PT, | RO, | RU, | SC, | SD, | SE, | SG, | SK, | SL, | ТJ, | TM, | TN, | TR, | TT, | TZ, |
| | | UA. | ŪĠ, | US, | UZ, | VC, | VN, | YU, | ZA, | ZM, | ZW, | AM, | AZ, | BY, | KG, | ΚZ, | MD, |
| | | RU. | TJ. | TM | | | | | | | | | | | | | |
| | RV | 7: GH, | GM, | KE, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | ΑT, | ΒE, | BG, |
| | | CH. | CY. | CZ. | DE. | DK. | EE, | ES, | FI, | FR, | GB, | GR, | HU, | IE, | IT, | LU, | MC, |
| | | NL, | PT, | SE, | SI, | SK, | TR, | BF, | ВJ, | CF, | CG, | CI, | CM, | GΑ, | GN, | GQ, | GW, |
| | | MT. | MR. | NE. | SN. | TD. | TG | | | | | | | | | | |
| | US 200 | 31995 | 556 | | A1 | | 2003 | 1023 | , | US 2 | 003- | 3734 | 92 | | 2 | 0030 | 225 |
| PRIO | US 2003199556 A1 20031023 US 2003-373492 20030225 PRIORITY APPLN. INFO.: US 2002-360252P P 20020227 | | | | | | | | | | | | | | | | |
| AB | | | | | | | | | | | | | | | | | |
| | (R) - 2 | - (2- (4 | l-oxa | zol- | 4-yl | phen | oxy) | ethy. | Lamı | no) - | т-ру | ridi | n-3- | утес | nano. |] + T CO | syrace |
| 00 (104 -) | (I) ar | nd a c | ryst | al f | orm | of t | he m | onon | ydra | те о | ı su | cn a | form | yıaı a sh | e sa. | LL, | ical |
| | proces | | ısefu | Lin | the | pre | para | tion | OI | tne | crys | Ldi | TOTII | s, pn | arma | ceuc | ICAI |
| comp | ositio | 1 | | | L - 1 | £ | | -+h- | 44 4 | f +- | an+i | na B | 3-ad | rene | raic | | |
| | compr: | sing | tne | crys | ian | TOTII | is, m | mam. | us O mal | nein | r 211 | ch c | rvet. | al f | orms | . т | hus. |
| | recep | cor-me | diac | ea a | 15ea | ses nhon | TII a | athy | lami | no) - | 9 5u 1-nv | ridi | -350 n-3- | vlet | hano | l in | МеОН |
| | was t | - (2- (4 | i-UXa i ui+ | h n- | tolu | pnes | ul fo | nic | acid | mon | ohvd | rate | to | aive | I. | The | |
| | crysta | leated | a wit | re o | f T | was | dete | rmin | ed e | 11.011 | J11 4 | | | J | | | |
| ΙT | 59121 | | | irc o | | was | acco | | - | | | | | | | | |
| 11 | DI D | 1 / Re | er Pacta | nt): | SPN | (Sv | nthe | tic | prep | arat | ion) | ; PR | EP (| Prep | arat | ion) | ; RACT |
| | (React | | | | | 1-2 | | | | | · | | | _ | | | |
| | (nede | rystal | lfor | ms o | f (o | xazc | lvlp | heno | xy) e | thyl | amin | opyr | idin | ylet | hano | 1) | |
| RN | 59121 | 1-75-4 | 4 CA | PLUS | | | | | | | | | | | | | |
| CN | Pyrid | ine, 3 | 3-[(1 | R) -2 | -bro | mo-1 | [[(| 1,1- | dime | thyl | ethy | l)di | meth | ylsi | 1y1] | oxy] | ethyl]- |
| | (9CI) | | | | | | | | | | | | | | | | |
| | • | | | | | | | | | | | | | | | | |

Absolute stereochemistry.

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THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 3 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN
                         2003:696890 CAPLUS
ACCESSION NUMBER:
                         139:230764
DOCUMENT NUMBER:
                         Preparation of (R)-2-(2-(4-oxazol-4-
TITLE:
                         ylphenoxy)ethylamino)-1-pyridin-3-ylethanol tosylate
                         and tosylate hydrate as a \beta3-adrenergic receptor
                         agonists
                         Krzyzaniak, Joseph Francis; Lafontaine, Jennifer Anne
INVENTOR(S):
                         Pfizer Products Inc., USA
PATENT ASSIGNEE(S):
                         PCT Int. Appl., 31 pp.
SOURCE:
                         CODEN: PIXXD2
                         Patent
DOCUMENT TYPE:
                         English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                            APPLICATION NO.
                                                                    DATE
                                DATE
                         KIND
     PATENT NO.
                                            ______
                                _____
                         ____
                                            WO 2003-IB575
                                                                    20030217
                                20030904
     WO 2003072571
                          A1
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
             TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
             NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
             ML, MR, NE, SN, TD, TG
                                                                 P 20020227
                                             US 2002-360248P
PRIORITY APPLN. INFO .:
      (R) -2 - (2 - (4 - oxazol - 4 - ylphenoxy) ethylamino) -1 - pyridin -3 - ylethanol tosylate \\
     and tosylate hydrate were prepared as β3-adrenergic receptor agonists
     (no data). Thus, a stirred mixture of (R)-3-[2-bromo-1-(tert-
     butyldimethylsilanyl)ethyl]pyridine, 2-(4-oxazol-4-ylphenoxy)ethylamine,
     and (Me2CH)2NH in Me2SO was heated at about 90° for 18 h to give
     56% (R)-(2-tert-butyldimethylsilanoxy-2-pyridin-3-ylethyl)-[2-(4-oxazol-4-
     ylphenoxy)ethyl]amine. This was stirred with Bu4NF in THF to give 52%
     deprotected product, which was stirred with TsOH.H2O in MeOH to give 74%
      (R)-2-[2-(4-oxazol-4-ylphenoxy)ethylamino]-1-pyridin-3-ylethanol tosylate.
IT
     591214-75-4P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
      (Reactant or reagent)
         (preparation of oxazolylphenoxyethylaminopyridinylethanol tosylate as a
        β3-adrenergic receptor agonist)
      591214-75-4 CAPLUS
RN
      Pyridine, 3-[(1R)-2-bromo-1-[[(1,1-dimethylethyl)dimethylsilyl]oxy]ethyl]-
CN
            (CA INDEX NAME)
      (9CI)
```

Searcher: Shears 571-272-2528

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS 2 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 4 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN L7

ACCESSION NUMBER:

2003:696869 CAPLUS

DOCUMENT NUMBER:

139:230762

TITLE:

Process for preparation of (R)-2-[2-(4-

azolylphenoxy)ethylamino]-1-pyridin-3-ylethanols via fermentation of 2-bromo-1-pyridin-3-ylethanone to (R)-2-bromo-1-pyridin-3-ylethanol using Absidia

cylindrospora ATCC 22751.

INVENTOR(S):

Chambers, Robert James; Dugger, Robert Wayne; Kang,

Ming; Tao, Yong; Wong, John Wing

PATENT ASSIGNEE(S):

SOURCE:

Pfizer Products Inc., USA PCT Int. Appl., 30 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PA' | rent : | NO. | | | KIN | D | DATE | | | APPL | ICAT: | ION 1 | NO. | | . Dž | ATE | | |
|----------|----------------|------|----------|-----|-----|------|------|------|------|------|-------|-------|-------|-----|------|------|-----|----|
| WO | 2003 | 0725 | <u>-</u> | | A1 | _ | 2003 | 0904 | , | WO 2 | 003- | IB56 | 1 | | . 2 | 0030 | 217 | |
| | W: | ΑE, | AG, | AL, | AM, | AT, | ΑU, | AZ, | BA, | BB, | BG, | BR, | BY, | BZ, | CA, | CH, | CN, | |
| | | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | ES, | F.T ' | GB, | GD, | GE, | Gn, | |
| | | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KP, | KR, | KZ, | LC, | LK, | LK, | |
| | | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NO, | NZ, | OM, | PH, | |
| | | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SK, | SL, | ТJ, | TM, | TN, | TR, | TT, | TZ, | UA, | |
| | | UG, | US, | UZ, | VN, | YU, | ZA, | ZM, | ZW, | AM, | ΑZ, | BY, | KG, | KZ, | MD, | RU, | ТJ, | ΉM |
| | RW: | GH. | GM, | KE, | LS, | MW, | MZ, | SD, | SL, | SZ, | ΤZ, | UG, | ZM, | ZW, | ΑT, | BE, | BG, | |
| | | CH. | CY, | CZ, | DE, | DK, | EE, | ES, | FΙ, | FR, | GB, | GR, | HU, | ΙE, | IT, | LU, | MC, | |
| | | NL, | PT, | SE, | SI, | SK, | TR, | BF, | ВJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | G₩, | |
| | | ML, | MR, | NE, | SN, | TD, | TG | | | | | | | | | | | |
| US | 2003 | 1990 | 46 | | A1 | | 2003 | 1023 | | US 2 | 003- | 3707 | 93 | | 2 | 0030 | 220 | |
| | 6689 | | | | | | | 0210 | | | | | | | | | | |
| us | 2004 | 0778 | 71 | | A1 | | 2004 | 0422 | | US 2 | | | | | | 0031 | | |
| PRIORIT | | | | | | | | | | US 2 | 002- | 3602 | 86P | | P 2 | | | |
| TRIONITI | | | | | | | | | | US 2 | 003- | 3707 | 93 | | A3 2 | 0030 | 220 | |
| OTHER S | HER SOURCE(S): | | | | CAS | REAC | T 13 | 9:23 | 0762 | ; MA | RPAT. | 139 | :230 | 762 | | | | |

AB Title compds. (I; Q = oxazolyl, pyrazolyl, thiazolyl) were prepared by (1) reduction of 2-bromo-1-pyridin-3-ylethanone using Absidia cylindrospora ATCC 22751 to give (R)-2-bromo-1-pyridin-3-ylethanol, (2) protection of the latter, (3) coupling of the 0-protected derivative with H2NCH2CH2C6H4Q-4,

I

and

(4) deprotection. Thus, 2-bromo-1-pyridin-3-ylethanone hydrobromide was contacted with cultures of Absidia cylindrospora ATCC 22751 to give 9.6% (R)-2-bromo-1-pyridin-3-ylethanol in >91.2% enantiomeric excess. The latter was silylated with tert-butyldimethylsilyl chloride (58%) and the product was heated with 2-(4-oxazol-4-ylphenoxy)ethylamine and diisopropylethylamine in Me2SO at about 90° for about 18 h to give 56% (R)-(2-tert-butyldimethylsilanoxy-2-pyridin-3-ylethyl) [2-(4-oxazol-4-ylphenoxy)ethyl]amine. Deprotection with Bu4NF in THF gave 52% (R)-2-[2-(4-oxazol-4-ylphenoxy)ethylamino]-1-pyridin-3-ylethanol in >99.9% excess.

IT 591214-75-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(process for preparation of azolylphenoxyethylaminopyridinylethanols via fermentation of pyridinylbromoethanone to bromopyridinylethanol using

Absidia

cylindrospora ATCC 22751)

RN 591214-75-4 CAPLUS

CN Pyridine, 3-[(1R)-2-bromo-1-[[(1,1-dimethylethyl)dimethylsilyl]oxy]ethyl](9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 15 THERE ARE 15

THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 5 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:696544 CAPLUS

DOCUMENT NUMBER: 139:219332

TITLE:

preparation of (oxazolylphenoxyethylamino)pyridinethan

ol for treatment of β 3-adrenergic

receptor-mediated diseases

INVENTOR(S):

Krzyaniak, Joseph F.; Lafontaine, Jennifer A.

PATENT ASSIGNEE(S):

Pfizer Inc., USA

SOURCE:

U.S. Pat. Appl. Publ., 13 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|---|--|--|---|
| US 2003166686 | A1 | 20030904 | US 2003-373473 | 20030225 |
| US 6689800 | B2 | 20040210 | | 0.000005 |
| US 2003199556 | A1 | 20031023 | US 2003-373492 | 20030225 |
| DDTODTTV APPIN TN | FO.: | | US 2002-360252P | P 20020227 |
| AB The present i 1-pyridin-3-y processes use comprising th receptor-medi | nvention provide that the provided in the property and method attention (R)-2-(2-6) | ylate salt (reparation o ods of treat s, condition 4-oxazol-4-v | (2-(4-oxazol-4-yl-pher I), the monohydrate of these compds., pharming β3-adrenergic is, and disorders by usyl-phenoxy) ethylamino) toluenesulfonic acid is | f such salt, maceutical compns. sing theses -1-pyridin-3- |
| IT 591214-75-4P RI.: RCT (Reac | | | | 1) |

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Prepara (Reactant or reagent)

(preparation of (oxazolylphenoxyethylamino)pyridinethanol for treatment

οf

β3-adrenergic receptor-mediated diseases)

591214-75-4 CAPLUS RN

Pyridine, 3-[(1R)-2-bromo-1-[[(1,1-dimethylethyl)dimethylsilyl]oxy]ethyl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 6 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2002:671909 CAPLUS

DOCUMENT NUMBER:

137:201144

TITLE: INVENTOR(S):

Sulfamide derivatives useful as $\beta 3$ agonists Dow, Robert Lee; Paight, Ernest Sidney, Jr.

PATENT ASSIGNEE(S):

Pfizer Products Inc., USA

571-272-2528 Searcher : Shears

SOURCE:

Eur. Pat. Appl., 41 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--------------------------------|----------|-----------|-----------------------------|-------------|
| EP 1236723 | A1 | 20020904 | EP 2002-251221 | 20020222 |
| R: AT, BE, CH, | | | GB, GR, IT, LI, LU, NL, | SE, MC, PT, |
| IE, SI, LT, | | 20021115 | СҮ, AL, TR JP 2002-51109 | 20020227 |
| JP 2002326983 US 2002128247 | A2 A1 | 20021113 | US 2002-86588 | 20020228 |
| BR 2002000626 | | 20030715 | BR 2002-626 | 20020301 |
| PRIORITY APPLN. INFO.: | | | US 2001-272681P | P 20010301 |
| OTHER SOURCE(S): | MARPAT | 137:20114 | 4 | |
| GI | | | | |

Sulfamides ROCHArCH2NR1CR2R3CH2XC6H4NR5SO2NR6R7 [Ar = (un)substituted aryl, heteroaryl; R = H, protective group; R1 = H, alkyl, protective group; RR1 = bond; R2, R3, R5 = H, alkyl; R6, R7 = h, (un)substituted alkyl, cycloalkyl, heterocyclic, aryl, heteroaryl; NR6R7 = cyclic amino; X = bond, O, S, S(O), SO2, (un)substituted NH; in which the benzene ring may be further substituted by halogen, CN, (un)substituted alkyl, alkoxy] were prepared for use in the treatment of diseases dependent on the signaling pathways associated with
$$\beta$$
-adrenergic receptors, such as obesity, diabetes, hypertension, gastrointestinal hypo- or hyper-motility and cardiovascular diseases. Thus, 4 -O2NC6H4CH2CMe2NH2 was treated with (R)-3-chlorostyrene oxide, cyclized to the nitrophenyloxazolidinone, the nitro group reduced to amine, and treated with 1-piperidinesulfamoyl chloride to give the oxazolidine I which was treated with KOH to give the

Ι

II

activity.
IT 364080-73-9P

OH

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of sulfamides with selective β 3 agonist activity)

title compound II. All the products showed selective β 3-adrenergic

RN 364080-73-9 CAPLUS

3-Pyridineethanol, 6-chloro- β -[[(1,1-dimethylethyl)dimethylsilyl]oxy]-CN, 4-methylbenzenesulfonate (ester), (βR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 7 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2002:314938 CAPLUS

DOCUMENT NUMBER:

136:340674

TITLE:

Alpha-aryl ethanolamines and their use as beta-3 adrenergic receptor agonists, for treatment of diseases and disorders, for increasing lean meat content in animals, and for use in combination with

other antiobesity agents

INVENTOR(S):

Day, Robert Francis; Lafontaine, Jennifer Anne

Pfizer Products Inc., USA PATENT ASSIGNEE(S):

SOURCE:

PCT Int. Appl., 101 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. KIND | | | | |) | DATE | | i | | ICAT: | | | | D2 | ATE | | |
|-----------------|----------------------|----------|-----|------|------|------|------|------|-----|-------|------------------|------|------|-----|-----|------|-----|
| MO | 2002 | 0328 | 97 | | A1 | - | 2002 | 0425 | 1 | | | | | | 2 | 0011 | 004 |
| WO | W: | AE. | AG. | AL. | AM. | AT, | AU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | ΒZ, | CA, | CH, | CN, |
| | ** • | co. | CR. | CU. | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | ES, | FI, | GB, | GD, | GΕ, | GH, |
| | | GM. | HR. | HU. | ID. | IL, | IN, | IS, | JP, | ΚE, | KG, | ΚP, | KR, | KZ, | LC, | LK, | LΚ, |
| | | LS. | LT. | T.U. | LV. | MA, | MD, | MG, | MK, | MN, | MW, | MX, | ΜZ, | NO, | NΖ, | PH, | PL, |
| | | PT. | RO. | RU, | SD, | SE, | SG, | SI, | SK, | SL, | ТJ, | TM, | TR, | TT, | TZ, | UA, | ŪG, |
| | | US. | UZ. | VN. | YU, | ZA, | ZW, | AM, | AZ, | BY, | KG, | ΚZ, | MD, | RU, | ΤJ, | T.W | |
| | RW: | GH. | GM, | KE, | LS, | MW, | MΖ, | SD, | SL, | SZ, | TZ, | UG, | ZW, | ΑT, | BE, | CH, | CY, |
| | | DE. | DK. | ES, | FI, | FR, | GB, | GR, | ΙE, | IT, | LU, | MC, | NL, | PT, | SE, | TR, | BF, |
| | | B.T | CF. | CG. | CT. | CM. | GA. | GN. | GO, | GW, | ML, | MR, | ΝE, | SN, | TD, | ΤG | |
| AU | 2001 | 0921 | 61 | | A.5 | | 2002 | 0429 | | AU 2 | 001- | 9216 | 1 | | 2 | OOTT | 004 |
| סם | 2001 | 0148 | 36 | | Δ | | 2003 | 0701 | | BR 2 | 001- | 1483 | 6 | | 2 | OOTT | 004 |
| EP | 1326 | 861 | | | A1 | | 2003 | 0716 | | EP 2 | 001- | 9723 | 90 | | 2 | OOLI | 004 |
| | R: | ΑT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | ΝL, | SE, | MC, | PT, |
| | | IE, | SI, | LT, | LV, | FI, | RO, | MK, | CY, | AL. | $^{\mathrm{TR}}$ | | | | _ | 0011 | 004 |
| EE | 2003 | 0019 | 1 | | Α | | 2003 | 1015 | | | 003- | | | | 2 | 0011 | |
| JP | TP 2004511555 T2 200 | | | 2004 | 0415 | | | 002- | | | | | 0011 | | | | |
| US | 2002 | 0523 | 92 | | A1 | | 2002 | 0502 | | US 2 | 001- | 9815 | 51 | | 2 | 0011 | 017 |

| | 6566377 2003203913 | B2 A1 | 20030520 20031030 | បន | 2003-379976 | | 20030305 |
|----------------|---|--------------------|--|----------------------|--|--------------|--|
| US BG NO | 6706743 107652 2003001573 2003000297 | B2 A A A1 | 20040316 20031128 20030416 20030831 | NO HR US WO | 2003-107652 2003-1573 2003-297 2000-242274P 2001-IB1847 2001-981551 | P W A3 | 20030320 20030408 20030415 20001020 20011004 20011017 |

OTHER SOURCE(S):

MARPAT 136:340674

GΙ

The invention provides β3-adrenergic receptor agonists (no data) of structural formula I [wherein Ar = pyridyl, oxazolyl, thiazolyl, or Ph; R = H, OH, oxo, halo, CF3, alkyl, alkoxy, cycloalkyl, NH2 or certain derivs., sulfonyl groups; R1 = H, alkyl, halo, alkoxy, OH; R2, R3, R4 = H, alkyl; R5 = 5- or 6-membered heterocycle with 1-4 N/O/S atoms; R6, R7 = H, halo, cyano, oxo, acyl, CO2H or derivs., OH, NH2 or derivs., (un)substituted alkyl, etc.; R8 = H, alkyl, halo; X = direct bond or O; Y = direct bond, alkylene, OCH2, CH2O, or O; with provisos], as well as the stereoisomers and prodrugs thereof, and the pharmaceutically acceptable salts of the compds., stereoisomers, and prodrugs. The invention further provides intermediates useful in the preparation of I, as well as

therapeutic

combinations of I and/or their stereoisomers/prodrugs/salts, with (other) anti-obesity agents. Over 60 invention compds. and 40 intermediates are named individually in claims. Exemplary prepns. of many intermediates and several invention compds. are given. For instance, reaction of (R)-2-chloro-5-oxiranylpyridine with 2-[4-(4-phenylthiazol-2-yl)phenoxy]ethylamine (preparation given) in EtOH at 80° gave 50% title compound (R)-II.

416860-25-8, Toluene-4-sulfonic acid 2-(6-(acetylamino)pyridin-3-yl)-2-[(tert-butyldimethylsilanyl)oxy]ethyl ester

RL: RCT (Reactant); RACT (Reactant or reagent) (precursor; preparation of α -arylethanolamines as β 3-adrenergic receptor agonists, useful as drugs and agents for increasing lean meat content in animals)

416860-25-8 CAPLUS RN

Acetamide, N-[5-[1-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-2-[[(4-dimethylethylethyll]oxy]-2-[[(4-dimethylethyll]oxy]-2-[[(4-dimethylethyll]oxy]-2-[[(4-dimethyll]oxy]-2-[[(4-dimethyll]oxy]-2-[[(4-dimethyll]oxy]-2-[[(4-dimethyll]oxy]-2-[[(4-dimethyll]oxy]-2-[[(4-dimethyll]oxy]-2-[[(4-dimethyll]oxy]-2-[[(4-dimethyll]oxy]-2-[[(4-dimethyll]oxy]-2-[[(4-dimethyll]oxy]-2-[[(4-dimethyll]oxy]-2-[[(4-dimethyll]oxy]-2-[[(4-dimethyll]oxy]-2-[[(4-dimethCN methylphenyl)sulfonyl]oxy]ethyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS 9 REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 8 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN

2001:729769 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

135:288694

Processes for preparing substituted pyridines, useful TITLE:

as intermediates for β -adrenergic receptor

agonists

Dow, Robert Lee; Schneider, Steven Roy INVENTOR(S):

Pfizer Products Inc., USA PATENT ASSIGNEE(S): Eur. Pat. Appl., 57 pp. SOURCE:

CODEN: EPXXDW

Patent DOCUMENT TYPE:

English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|--------------------------------------|---|---|--|
| EP 1138685 EP 1138685 | A2 A3 | 20011004 20030402 20040519 | EP 2001-302635 | 20010321 |
| EP 1138685 R: AT, BE, | • | K, ES, FR, | GB, GR, IT, LI, LU, NL, | SE, MC, PT, |
| AT 267204 US 2002077478 US 6518431 ZA 2001002538 CA 2342571 BR 2001001280 JP 2001316393 RU 2223956 CN 1320596 US 2003114670 | LT, LV, FI E A1 B2 A AA A C2 C2 A A1 | 2, RO 20040615 20020620 20030211 20020930 20010930 20011106 20011113 20040220 20011107 20030619 | AT 2001-302635 US 2001-820137 ZA 2001-2538 CA 2001-2342571 BR 2001-1280 JP 2001-100321 RU 2001-108594 CN 2001-112348 US 2002-317720 | 20010321 20010328 20010328 20010329 20010330 20010330 20010330 20010402 20021212 |

571-272-2528 Searcher : Shears

20040708 US 2004133005 A1PRIORITY APPLN. INFO .:

20031010 us 2003-684146 P 20000331 US 2000-193772P US 2001-820137 A3 20010328 A3 20021212

US 2002-317720

CASREACT 135:288694; MARPAT 135:288694

GT

OTHER SOURCE(S):

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Several processes for preparing various pyridine derivs. are claimed. AB products are used as intermediates in the synthesis of known $\beta\text{--adrenergic}$ receptor agonists. In particular, the halide and sulfonate ester intermediates I are prepared, and are used in the synthesis of the amino alcs. II [wherein n = 0-3; R1 = H, halo; R2 = H, halo, CF3, cyano, SR4, OR4, SO2R4, OCOR5, (un) substituted alkyl; R3 = tetrahydrofuranyl, tetrahydropyranyl, or silyl protecting group; X = halo, OSO3Me, OSO2Ph, OSO2C6H4Me-p, OSO2C6H4NO2-m, OSO2C6H4NO2-p; R4, R5 = H, (un) substituted alkyl, alkoxy, (hetero) cycloalkyl, (hetero) aryl; or R5 = N(R4)2; R6 = COR7 or CO2R7; R7 = alkyl; Y = sidechains containing specified benzene, indene, benzofuran, indole, benzimidazole, and analogous aromatic nuclei]. For example, 2-chloro-5-cyanopyridine was reduced with Dibal-H to give the 5-aldehyde, which was methylenated with Ph3P+MeBr- and KOBu-tert to give 2-chloro-5-vinylpyridine. The vinyl compound was dihydroxylated with AD-mix- β ® to give the (R)-diol, which was O-tosylated with p-MeC6H4SO2Cl and then silylated with tert-BuSiMe2Cl to give the intermediate III. Coupling of III with 4-nitrophenethylamine, protection with di-tert-Bu dicarbonate, and reduction of the nitro group with

concomitant dechlorination gave the final, silylated intermediate IV.

364080-73-9P 364080-77-3P IT

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (intermediate; processes for preparing substituted pyridines useful as intermediates for β -adrenergic receptor agonists)

364080-73-9 CAPLUS RN

3-Pyridineethanol, 6-chloro- β -[[(1,1-dimethylethyl)dimethylsilyl]oxy]-CN , 4-methylbenzenesulfonate (ester), (βR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN364080-77-3 CAPLUS

> Shears 571-272-2528 Searcher :

CN 3-Pyridineethanol, β -[[(1,1-dimethylethyl)dimethylsilyl]oxy]-, 4-methylbenzenesulfonate (ester), (β R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 9 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2001:669980 CAPLUS

DOCUMENT NUMBER:

135:357834

TITLE:

Synthesis and fungicidal activity of a series of novel

aryloxylepidines

AUTHOR(S):

Kirby, Neil V.; Daeuble, John F.; Davis, L. Navelle;

Hannum, Anna C.; Hellwig, Karin; Lawler, Lori K.;

Parker, Marshall H.; Pieczko, Mary E.

CORPORATE SOURCE:

Dow AgroSciences LLC, Indianapolis, IN, 46268-1054,

USA

SOURCE:

Pest Management Science (2001), 57(9), 844-851

CODEN: PMSCFC; ISSN: 1526-498X

PUBLISHER:

John Wiley & Sons Ltd.

DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 135:357834

AB A series of novel (hetero)aryloxylepidine derivs. was devised as hybrid structures of the phenoxyquinoline and phenethoxyquin(az)oline fungicides. Synthesis of these targets required the development of several new routes to derivatized 4-hydroxymethylquinolines, and subsequent coupling with phenols or haloarenes. The aryloxylepidines generally showed moderate broad-spectrum fungicidal activity across several diseases of cereals. Substitution of the quinoline ring with chlorine at the 7- and/or 5-positions gave mols. with high levels of protectant activity against Erysiphe graminis f sp tritici (powdery mildew of wheat), but this did not improve the level of fungicidal activity against other diseases. In vitro activity against mitochondrial electron transport complex I (MET) derived from Ustilago maydis showed that 8-fluorolepidine analogs were moderately active at this target site, while the more fungicidally active 7- and 5,7-substituted compds. were inactive. This indicates that MET is not the primary target of these highly active powdery mildewicides.

IT 203261-23-8P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and fungicidal activity of aryloxylepidines)

RN 203261-23-8 CAPLUS

CN Quinoline, 7-chloro-4-[2,2,2-trifluoro-1-[(5-fluoro-2-pyrimidinyl)oxy]ethyl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS 11 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 10 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2001:636031 CAPLUS

DOCUMENT NUMBER:

135:210828

TITLE:

Preparation of novel phenylheteroalkylamines as

inhibitors of nitric oxide synthase

INVENTOR(S):

Birkinshaw, Tim; Cheshire, David; Mete, Antonio

PATENT ASSIGNEE(S):

Astrazeneca AB, Swed. PCT Int. Appl., 88 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE: FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PAT | PATENT NO. | | | | | D | DATE | | | APPL | ICAT: | ION 1 | 10. | | D. | ATE | |
|--------|---------------|------|------|-----|-----|------|------|------|------|------|-------|-------|-----|-----|------|------|-------|
| WO. | 2001 | 0627 | 13 | | A1 | | 2001 | 0830 | 1 | WO 2 | 001- | SE37 |) | | 2 | 0010 | 220 |
| ,,, | W: | AE, | AG, | AL, | AM, | AT, | AU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | BZ, | CA, | CH, | CN, |
| | | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EE, | ES, | FI, | GB, | GD, | GE, | GH, | GM, | HR, |
| | | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KP, | KR, | ΚZ, | LC, | LK, | LR, | LS, | LT, |
| | | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | ΜZ, | NO, | NZ, | PL, | PT, | RO, | RU, |
| | | SD, | SE, | SG, | SI, | SK, | SL, | ТJ, | TM, | TR, | TT, | TZ, | UA, | ŪG, | US, | UZ, | VN, |
| | | YU, | ZA, | ZW, | AM, | AZ, | BY, | KG, | KZ, | MD, | RU, | TJ, | TM | | | | |
| | RW: | GH, | GM, | KE, | LS, | MW, | MZ, | SD, | SL, | SZ, | ΤZ, | UG, | ZW, | ΑT, | BE, | CH, | CY, |
| | | DE, | DK, | ES, | FI, | FR, | GB, | GR, | ΙE, | IT, | LU, | MC, | NL, | PT, | SE, | TR, | BF, |
| | | ВJ, | CF, | CG, | CI, | CM, | GΑ, | GN, | GW, | ML, | MR, | ΝE, | SN, | TD, | ΤG | | |
| AU | 2001 | 0343 | 13 | | A5 | | 2001 | 0903 | | AU 2 | 001- | 3431 | 3 | | 2 | 0010 | 220 |
| | 1263 | | | | | | | | | EP 2 | 001- | 9064 | 90 | | 2 | 0010 | 220 |
| EP | 1263 | 714 | | | В1 | | 2004 | 0428 | | | | | | | | | |
| | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, |
| | | ΙE, | SI, | LT, | LV, | FI, | RO, | MK, | CY, | AL, | TR | | | | _ | 0010 | • • • |
| JP | JP 2003523992 | | | T2 | | 2003 | 0812 | | JP 2 | 001- | 5617 | 23 | | 2 | 0010 | 220 | |
| AT | 2654 | 22 | | | E | | 2004 | 0515 | | AT 2 | 001- | 9064 | 90 | | | 0010 | |
| បន | 2003 | | | | | | | | | US 2 | 002- | 2048 | 15 | | 2 | 0020 | 822 |
| US | 6743 | 939 | | | В2 | | 2004 | 0601 | | | | | | | | | 000 |
| IORIT: | Y APP | LN. | INFO | .: | | | | | | GB 2 | 000- | 4149 | | | A 2 | 0000 | 223 |

WO 2001-SE370

W 20010220

OTHER SOURCE(S):

MARPAT 135:210828

GΙ

$$z \xrightarrow{X} V \xrightarrow{W} NR^{1}R^{2}$$

The title compds. [I; X, Y = alkyl, alkoxy, halo, etc.; Z = H, F; V = O, SOn, NR3; W = alkyl, alkenyl, Ph, etc.; R1, R2 = H, alkyl, cycloalkyl, etc.; NR1R2 = (un)substituted 4-8 membered saturated azacyclic ring

incorporating one further heteroatom selected from O, S or NR8, 5-membered aromatic azacyclic ring optionally incorporating one further N atom; R3 = H, alkyl; R8 = H, alkyl, etc.; n = 0-2] and their pharmaceutically acceptable salts which are inhibitors of nitric oxide synthase and are thereby particularly useful in the treatment or prophylaxis of inflammatory disease and pain, were prepared E.g., a 4-step synthesis of (1R)-I.oxalate [X = Cl; Y = CN; Z = H; V = O; W = Ph; R1 = H; R2 = Me] was given. The exemplified compds. I (with the exception of one) showed IC50 of < 40 µM against nitric oxide synthase.

IT 357443-84-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of novel phenylheteroalkylamines as inhibitors of nitric oxide

synthase)

RN 357443-84-6 CAPLUS

CN Benzonitrile, 4-chloro-2-[4-iodo-1-(2-pyridinyl)butoxy]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 11 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2000:639179 CAPLUS

DOCUMENT NUMBER:

133:222605

TITLE:

Preparation of 4-substituted quinolines as plant

fungicides.

INVENTOR(S):

Daeuble, John; Davis, L. Navell; Hellwig, Karin; Kirby, Neil; Parker, Marshall H.; Pieczko, Mary;

Thomason, Lori K.

PATENT ASSIGNEE(S):

SOURCE:

U.S., 13 pp.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

USA

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------------------|------|----------|----------------------------------|----------------------|
| | | | | |
| US 6117884 PRIORITY APPLN. INFO.: | A | 20000912 | US 1997-904282 US 1997-904282 | 19970731 19970731 |

OTHER SOURCE(S): GI

MARPAT 133:222605

- Title compds. [I; X = CR5; Y = CR51; Z = O, S, SO, SO2, NR6, CR7R8; R1-R4 AΒ = H, OH, NO2, halo, iodo, alkyl, alkoxy, haloalkyl, etc.; V = CR7R8; A = (unsatd.) (substituted) (heteroatom-interrupted) hydrocarbyl, cycloalkyl, Ph, furyl, pyridyl, pyrimidinyl, naphthyl, pyrazolyl, etc.; R5 = H, Cl, Me; R51 = H, C1, Br; R6 = H, alkyl, acyl; R7, R8 = H, alkyl, alkenyl, acyl, cyano, OH; R7R8C = carbocyclyl], were prepared Thus, 4-bromomethyl-8-chloroquinoline was stirred overnight with NaH and 4-fluorophenol in THF to give 51.2% 4-[(4-fluorophenoxy)methyl]-8chloroquinoline. Several I at 6.25-400 ppm gave 50-100% control of Erysiphe graminis on wheat seedlings.
- IT 203261-23-8P RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of 4-substituted quinolines as plant fungicides)
- RN 203261-23-8 CAPLUS Quinoline, 7-chloro-4-[2,2,2-trifluoro-1-[(5-fluoro-2-CN pyrimidinyl)oxy]ethyl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 12 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2000:259769 CAPLUS

DOCUMENT NUMBER:

INVENTOR(S):

132:279118

TITLE:

Preparation of 2-aminopyridines as drug intermediates

Devries, Keith Michael; Raggon, Jeffrey William; Shanker, Ravi Mysore; Vanderplas, Brian Clement;

Urban, Frank John

PATENT ASSIGNEE(S):

Pfizer Products Inc., USA

SOURCE:

Eur. Pat. Appl., 42 pp. CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PA | PATENT NO. | | | | |) | DATE | | APP | LICAT | ION 1 | NO. | | | DATE | |
|----------|------------------------------|------------|----------|-----|--------------------|---|------------------------------|----------------------|----------------|-------------------------|----------------------|------------|-----|----|----------------------------------|--------------|
| | 9941 | | - | | A2 | • | 2000 | | EP | 1999- | 30798 | 87 | | | 19991 | .011 |
| EP | 9941 R: | AT, | | CH, | • | | ES, | | GB, GF | R, IT, | LI, | LU, | NL, | SE | , MC, | PT, |
| CA TR | 6090 2285 9902 | 914 565 | J1, | 21, | A C A2 | | 2000 2003 2000 2000 | 0603 0522 | CA TR | 1999- 1999- 1999- | 2285 9902 | 914 565 | | | 19990 19991 19991 19991 | .013 |
| AU ZA | 9909 9954 9906 2000 | 009 499 | 64 | | A A1 A A2 | | 2000 2000 2001 2000 | 0622 0 417 | AU ZA | 1999- 1999- 1999- | 5400 6499 | 9 | | | 19991 19991 19991 | .014 .014 |
| CN BR | 1256 9904 6124 | 276 689 | 01 | • | A A A | | 2000 2000 | 0614 1114 0926 | CN | 1999- 1999- 2000- | 1254 4689 4882 | 39 45 | | | 19991 19991 20000 | 015 0120 |
| PRIORIT | | | INFO | • : | | | | | US US US | 1998- 1999- 1999- | 1454 | 60P | | _ | 19981 19990 19990 | 723 |

OTHER SOURCE(S):

CASREACT 132:279118; MARPAT 132:279118

AB R3NHZCH(OR2)CH2R1 (Z = pyridine-2,5-diyl throughout)[R1 = halo, OSO2Me, OSO2Ph, etc.; R2 = tetrahydrofuranyl, -pyranyl, silyl protecting group; R3 = (un)substituted alkanoyl or -Bz] were prepared as intermediates for β3-adrenergic agonists. Thus, N-(5-vinyl-2-pyridinyl)acetamide (preparation given) was asym. dihydroxylated and the mono-tosylated product O-protected to give (R)-AcNHZCH(OSiMe2CMe3)CH2OSO2C6H4Me-4. Conversion of the latter to aforementioned β3-adrenergic agonists was given.

IT 263898-20-0P
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of 2-aminopyridines as drug intermediates)

RN 263898-20-0 CAPLUS
CN Acetamide, N-[5-[(1R)-1-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-2-[[(4-methylphenyl)sulfonyl]oxy]ethyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

L7 ANSWER 13 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1998:112347 CAPLUS

DOCUMENT NUMBER:

128:180342

TITLE:

Preparation of 4-substituted quinolines having

fungicidal activity

INVENTOR(S):

Daeuble, John; Davis, L. Navell; Hellwig, Karin; Kirby, Neil; Parker, Marshall H.; Pieczko, Mary;

Thomason, Lori K.

PATENT ASSIGNEE(S):

DowElanco, USA

SOURCE:

PCT Int. Appl., 44 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English 1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PA | rent 1 | NO. | | | KINI |) | DATE | | _ | APPL: | ICAT: | ION 1 | NO. | | D2 | ATE | | |
|-----|--------|-------------------|-----|-----|------|-----|------|------|-----|-------|-------|-------|-----|-----|-----|------|-----|----|
| WO | 9805 | - - 645 | | | A1 | | | 0212 | | | | | | | _ | 9970 | | |
| | W: | AT. | AM. | AU. | AZ. | BA, | BB, | BG, | BR, | BY, | CA, | CH, | CN, | CU, | CZ, | EE, | GE, | |
| | *** | HU, | TT. | TP. | KE. | KG. | KR. | ΚZ, | LC. | LK, | LR. | LS, | LT, | MD, | MG, | MK, | MN, | |
| | | MW, | MX, | NO, | NZ, | PL, | RO, | RU, | SD, | SG, | SI, | SK, | ТJ, | TM, | TR, | TT, | UA, | |
| | | UG, | UZ, | VN, | YU | | | | | | | | | | | | | |
| | RW: | AT. | BE. | CH. | DE, | DK, | ES, | FI, | FR, | GB, | GR, | ΙE, | IT, | LU, | MC, | ΝL, | PT, | SE |
| ΙΙΑ | 9738 | - | , | , | A1 | | 1998 | 0225 | | AU 1 | 997- | 3894 | 8 | | 1 | 9970 | 731 | |
| | 7237 | | | | В2 | | 2000 | | | | | | | | | | | |

| EP | 925282 | | | A1 | 19990630 | ΕP | 1997-936228 | | 19970731 |
|----------|-----------|------|-----|--------|------------|----|--------------|---|----------|
| | R: DE, | DK, | ES, | FR, GB | , IT, NL | | | | |
| BR | 9711110 | • | • | A . | 19990817 | BR | 1997-11110 | | 19970731 |
| | 1228084 | | | A | 19990908 | CN | 1997-196937 | | 19970731 |
| | 20015080 | 29 | | Т2 | 20010619 | JР | 1998-507989 | | 19970731 |
| | Y APPLN. | | | 12 | 20010010 | | 1996-22907P | P | 19960801 |
| PRIORIT | I APPLIN. | INFO | • • | | | | 1997-US13090 | W | 19970731 |
| OTHER SO | OURCE(S): | | | MARPAT | 128:180342 | | 2337 002000 | • | |

$$R^{2}$$
 R^{3}
 R^{4}
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 R^{3}

GΙ

AB The title compds. [I; X = CR5 (wherein R5 = H, Cl, Me); Y = CR5 (R5 = H, Cl, Br); Z = O, S, SO, SO2, NR6 (R6 = H, Cl-4 alkyl, Cl-4 acyl, etc.); V = CR7R8 (R7, R8 = H, Cl-4 alkyl, Cl-4 alkenyl, etc.; R7R8 form a carbocyclic ring containing 4-6 carbon atoms); A = Cl-4 (un)substituted (un)saturated alkyl,

C3-8 cycloalkyl, cycloalkenyl, (un) substituted Ph, etc.; R1-R4 = H, OH, NO2, etc.], useful as plant fungicides, were prepared Thus, treatment of 4-hydroxymethyl-7-chloroquinoline with NaH in THF followed by addition of 2-chloro-3-trifluoromethylpyridine afforded I [X = Y = CH; V = CH2; Z = 0; A = 3-trifluoromethyl-2-pyridyl; R3 = Cl; R1 = R2 = R4= H] which showed 50-100% control against wheat powdery mildew at 100 ppm.

IT 203261-23-8P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of 4-substituted quinolines having fungicidal activity)

RN 203261-23-8 CAPLUS

CN Quinoline, 7-chloro-4-[2,2,2-trifluoro-1-[(5-fluoro-2-pyrimidinyl)oxy]ethyl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 14 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1998:31145 CAPLUS

DOCUMENT NUMBER:

128:102082

TITLE:

Preparation of substituted sulfonamides as selective

 $\beta\text{--3}$ agonists for the treatment of diabetes and

obesity

INVENTOR(S):

Fisher, Michael H.; Naylor, Elizabeth M.; Parmee, Emma

R.; Shih, Thomas; Ok, Hyun; Weber, Ann E.

PATENT ASSIGNEE(S):

SOURCE:

Merck and Co., Inc., USA

U.S., 30 pp., Cont.-in-part of U.S. 5,561,142.

CODEN: USXXAM

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT | NO. | KIN | D DATE | APPLICATION NO. | DATE |
|---|---|---|--|--|---|
| US 5705 US 5561 CA 2261 WO 9804 | 142 167 | A A AA A1 | 19961001 19980205 | US 1996-684901 US 1995-445630 CA 1997-2261167 WO 1997-US11999 | 19970721 |
| | IL, IS, NO, NZ, VN, YU, GH, KE, GB, GR, | JP, KG, PL, RO, AM, AZ, LS, MW, IE, IT, | KR, KZ, LC, RU, SG, SI, BY, KG, KZ, SD, SZ, UG, | BR, BY, CA, CN, CU, LK, LR, LT, LV, MD, SK, SL, TJ, TM, TR, MD, RU, TJ, TM ZW, AT, BE, CH, DE, PT, SE, BF, BJ, CF, | MG, MK, MN, MX, TT, UA, US, UZ, DK, ES, FI, FR, |
| AU 9737 EP 9158 R: JP 2000 PRIORITY APE | 232 47 AT, BE, 516593 | A1 A1 CH, DE, T2 | 19980220 19990519 | EP 1997-934091 GB, GR, IT, LI, LU, | NL, SE, PT, IE, FI |

US 1995-445630 A2 19950522 US 1996-684901 A 19960725 WO 1997-US11999 W 19970721

OTHER SOURCE(S):

MARPAT 128:102082

GΙ

$$(R^1)_{n}ACH (OH) CH_2NHCR^2R^3X_m$$
 R^4
 $NR^6SO_2 (CH_2)_pR^7$
 R^5

Substituted sulfonamides I [n = 0-5; m = 0, 1; p = 0-3; A = 5- orAΒ 6-membered heterocyclic ring or a fused heterocyclic ring; R1 = OH, oxo, halo, cyano, alkyl, etc.; R2, R3 = H, alkyl; X = CH2, CH2CH2, CH:CH, CH2O; R4, R5 = H, alkyl, halo, etc.; R6 = H, alkyl; R7 = $Z(R1\alpha)n$ with $R1\alpha = R1$, cycloalkyl, substituted Ph, heterocyclyl and Z = Ph, naphthyl, etc.], selective $\beta3$ adrenergic receptor agonists with very little $\beta1$ and $\beta2$ adrenergic receptor activity (no data), were prepared The compds. thus have potent activity in the treatment of Type II diabetes and obesity. The compds. are prepared by coupling an aminoalkylphenyl-sulfonamide with an appropriately substituted epoxide. E.g., reaction of (3-methyl-5-isoxazolyl)oxirane and 4-02NC6H4CH2CH2NH2, followed by Boc protection, gave N-[2-[4-(aminophenyl)]ethyl]-2-hydroxy-2-(3-methylisoxazol-5-yl)ethylcarbamic acid 1,1-dimethylethyl ester. The latter was reacted with 5-(1-(4-octylthiazol-2-yl)indolinesulfonyl chloride, followed by deprotection, to give N-[4-[2-[[2-hydroxy-2methylisoxazol-4-yl)ethyl]amino]ethyl]phenyl]-1-(4-octylthiazol-2-yl)-5indolinesulfonamide.

IT 201470-61-3P 201470-74-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of substituted sulfonamides as selective $\beta\text{--}3$ agonists for the treatment of diabetes and obesity)

RN 201470-61-3 CAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine-1-carboxylic acid, 5-[2-bromo-1-[[(1,1-dimethylethyl)dimethylsilyl]oxy]ethyl]-2,3-dihydro-, phenylmethyl ester (9CI) (CA INDEX NAME)

RN 201470-74-8 CAPLUS
CN Furo[2,3-b]pyridine, 5-[2-bromo-1-[[(1,1-dimethylethyl)dimethylsilyl]oxy]e
thyl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 15 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1994:557652 CAPLUS

DOCUMENT NUMBER:

121:157652

TITLE:

[[(Tetrazolylbiphenylyl)methyl]amino]pyridinecarboxyla

tes as Angiotensin II Receptor Antagonists

INVENTOR(S):

Winn, Martin; De, Biswanath; Zydowsky, Thomas M.; Kerkman, Daniel J.; Debernardis, John F.; Rosenberg, Saul H.; Shiosaki, Kazumi; Basha, Fatima Z.; Tasker,

Andrew S.; et al.

PATENT ASSIGNEE(S):

Abbott laboratories, USA

SOURCE:

U.S., 98 pp. Cont.-in-part of U.S. Ser. No. 744,241.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|----------|
| | | | | |
| us 5250548 | A | 19931005 | US 1992-844351 | 19920302 |

| CA 2050723 | ΆA | 19920311 | | 1991-2050723 | | 19910905 |
|-------------------------|----------|----------------------|-----|----------------------------|----|----------------------|
| AU 9183744 AU 647174 | A1 B2 | 19920312 19940317 | AU | 1991-83744 | | 19910909 |
| JP 04261156 | A2 | 19920917 | | 1991-258343 | | 19910910 |
| JP 07053551 | A2 | 19950228 | ~ ~ | 1993-187412 1990-580400 | В2 | 19930630 19900910 |
| PRIORITY APPLN. INFO.: | | | | 1991-744241 | | 19910815 |
| OTHER SOURCE(S): | MARPAT | 121:157652 | | | | |

GI

AB The title compds., [[(tetrazolylbiphenylyl)methyl]amino]pyridinecarboxylat es I (R3 = H, alkyl, halo; R5 = alkyl) were disclosed. Pharmacol. test data for I as angiotensin receptor antagonists were reported.

IT 157361-16-5P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as intermediate for

Ι

[[(tetrazolylbiphenylyl)methyl]amino]py

ridinecarboxylate) 157361-16-5 CAPLUS

RN 157361-16-5 CAPLUS

CN 2-Pyridinamine, N-propyl-3-[2,2,2-trifluoro-1-[(trimethylsily1)oxy]ethyl]
N-[[2'-[1-(triphenylmethyl)-1H-tetrazol-5-yl][1,1'-biphenyl]-4-yl]methyl]
(9CI) (CA INDEX NAME)

L7 ANSWER 16 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1982:68256 CAPLUS

DOCUMENT NUMBER:

96:68256

New syntheses of trichloromethyl functional alcohols. TITLE:

Studies of their tranquilizing properties

Deleris, Gerard; Dunogues, Jacques; Babin, Pierre; AUTHOR(S):

Calas, Raymond; Bardone, Marie Claude; Guyonnet, Jean

Claude

CORPORATE SOURCE: Lab. Chim. Org. Composes Org. Silicium Etain, CNRS,

Talence, 33405, Fr.

European Journal of Medicinal Chemistry (1981), 16(6), SOURCE:

533-7

CODEN: EJMCA5; ISSN: 0009-4374

Journal DOCUMENT TYPE: French LANGUAGE:

CASREACT 96:68256 OTHER SOURCE(S):

CCl3CHROH (I, R = BuC.tplbond.C, Me3SiC.tplbond.C, Me3SiCH2C.tplbond.C, PhC.tplbond.C, 3-pyridylethynyl, Eto2CCH2, Et2NCOCH2, 2-pyridyl) were prepared by treating RSiMe3 with chloral, and methanolysis of Cl3CCHROSiMe3.

I(R = Et2NCOCH2, 2-pyridyl) had tranquilizing activity comparable to that

of meprobamate, the pyridine derivative being free of convulsant

side-effects.

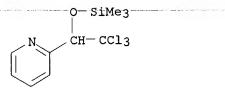
80673-05-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and desilylation of)

80673-05-8 CAPLUS RN

Pyridine, 2-[2,2,2-trichloro-1-[(trimethylsilyl)oxy]ethyl]- (9CI) (CA CN INDEX NAME)



FILE 'CAOLD' ENTERED AT 11:43:55 ON 10 AUG 2004

0 S L6 L8

FILE 'USPATFULL' ENTERED AT 11:44:01 ON 10 AUG 2004 15 S L6 L9

ANSWER 1 OF 15 USPATFULL on STN

2004:172841 USPATFULL ACCESSION NUMBER:

Process for preparing substituted pyridnes TITLE: Dow, Robert L., Waterford, CT, UNITED STATES

INVENTOR(S):

Schneider, Steven R., Stonington, CT, UNITED STATES

Pfizer Inc (U.S. corporation) PATENT ASSIGNEE(S):

NUMBER KIND DATE A1 20040708 US 2004133005 PATENT INFORMATION: A1 20031010 (10) US 2003-684146 APPLICATION INFO .:

Division of Ser. No. US 2002-317720, filed on 12 Dec RELATED APPLN. INFO.: 2002, GRANTED, Pat. No. US 6670480 Division of Ser. No. US 2001-820137, filed on 28 Mar 2001, GRANTED, Pat. No.

> Shears 571-272-2528 Searcher :

US 6518431

NUMBER DATE PRIORITY INFORMATION: US 2000-193772P 20000331 (60)

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE: PFIZER INC., PATENT DEPARTMENT, MS8260-1611, EASTERN

POINT ROAD, GROTON, CT, 06340

NUMBER OF CLAIMS: EXEMPLARY CLAIM: 48

LINE COUNT:

2381

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

A process for preparing a compound of the formula ##STR1##

wherein n, R.sup.1, R.sup.2, R.sup.3 and X are as defined above, used as an intermediate in the synthesis of β -adrenergic receptor agonists.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 2 OF 15 USPATFULL on STN

ACCESSION NUMBER:

2004:102001 USPATFULL

TITLE:

Processes and intermediates useful in preparing

beta-3-adrenergic receptor agonists

INVENTOR(S):

Chambers, Robert J., Mystic, CT, UNITED STATES

Dugger, Robert W., Stonington, CT, UNITED STATES

Kang, Ming, Salem, CT, UNITED STATES Tao, Yong, Salem, CT, UNITED STATES

Wong, John W., East Lyme, CT, UNITED STATES

PATENT ASSIGNEE(S):

Pfizer Inc (U.S. corporation)

KIND DATE NUMBER _____ ___

PATENT INFORMATION:

APPLICATION INFO .:

US 2004077871 A1 20040422 US 2003-682762 A1 20031009 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 2003-370793, filed on 20 Feb

2003, GRANTED, Pat. No. US 6689888

NUMBER DATE _______

PRIORITY INFORMATION:

US 2002-360286P 20020227 (60)

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE: PFIZER INC., PATENT DEPARTMENT, MS8260-1611, EASTERN

POINT ROAD, GROTON, CT, 06340

NUMBER OF CLAIMS:

11

EXEMPLARY CLAIM:

1

LINE COUNT:

714

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides processes useful in the preparation of

certain β .sub.3-adrenergic receptor agonists of the structural

formula ##STR1##

the pharmaceutically acceptable salts thereof, and the hydrates of said pharmaceutically acceptable salts, wherein HET is as described herein. The invention further provides intermediates useful in the preparation

of such agonists, and processes useful in the production of such intermediates.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 3 OF 15 USPATFULL on STN

ACCESSION NUMBER:

2003:289154 USPATFULL

TITLE:

Beta3 adrenergic receptor agonists and uses thereof

INVENTOR(S):

Day, Robert F., Groton, CT, UNITED STATES

Lafontaine, Jennifer A., San Diego, CA, UNITED STATES

PATENT ASSIGNEE(S):

Pfizer Inc. (U.S. corporation)

| | NUMBER | KIND | DATE | |
|-----------------------|------------------|--------|------------------------------|--|
| | | | | |
| PATENT INFORMATION: | US 2003203913 | | 20031030 | |
| | us 6706743 | В2 | 20040316 | |
| APPLICATION INFO.: | US 2003-379976 | | 20030305 (10) | |
| RELATED APPLN. INFO.: | Division of Ser. | No. US | 2001-981551, filed on 17 Oct | |
| 1/11/11/11/11/11/11 | | | *** 65.66377 | |

2001, GRANTED, Pat. No. US 6566377

NUMBER DATE

PRIORITY INFORMATION:

US 2000-242274P 20001020 (60)

DOCUMENT TYPE: FILE SEGMENT: Utility APPLICATION

LEGAL REPRESENTATIVE:

PFIZER INC., PATENT DEPARTMENT, MS8260-1611, EASTERN

POINT ROAD, GROTON, CT, 06340

NUMBER OF CLAIMS: EXEMPLARY CLAIM: 22

LINE COUNT:

3395

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The instant invention provides β.sub.3 adrenergic receptor agonists of structural Formula (I), ##STR1##

the stereoisomers and prodrugs thereof, and the pharmaceutically acceptable salts of the compounds, stereoisomers and prodrugs, wherein Ar, R, R.sub.1, R.sub.2, R.sub.3, R.sub.4, R.sub.5, R.sub.6, R.sub.7, R.sub.8, X, and Y, are as defined herein.

The invention further provides intermediates useful in the preparation of the compounds of Formula (I), to combinations of the compounds of Formula (I), the stereoisomers and prodrugs thereof, and the pharmaceutically acceptable salts of the compounds, stereoisomers and prodrugs, with anti-obesity agents; to pharmaceutical compositions comprising the compounds of Formula (I), the stereoisomers and prodrugs thereof, and the pharmaceutically acceptable salts of the compounds, stereoisomers and prodrugs, or pharmaceutical compositions comprising the compounds of Formula (I), the stereoisomers and prodrugs thereof, and the pharmaceutically acceptable salts of the compounds, stereoisomers and prodrugs, and anti-obesity agents; and methods of treating \$\beta\$.sub.3 adrenergic receptor-mediated diseases, conditions, or disorders in a mammal which methods comprise administering to the mammal an effective amount of a compound of Formula (I), a stereoisomer or prodrug thereof, or a pharmaceutical composition thereof; or a combination of a compound of Formula (I), a pharmaceutically acceptable salt of the compound, stereoisomer, or prodrug, and an anti-obesity

agent, or a pharmaceutical composition thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 4 OF 15 USPATFULL on STN

ACCESSION NUMBER:

2003:282703 USPATFULL

TITLE:

Processes and intermediates useful in preparing

beta3-adrenergic receptor agonists

INVENTOR(S):

Chambers, Robert J., Mystic, CT, UNITED STATES Dugger, Robert W., Stonington, CT, UNITED STATES

Kang, Ming, Salem, CT, UNITED STATES Tao, Yong, Salem, CT, UNITED STATES

Wong, John W., East Lyme, CT, UNITED STATES

| | NUMBER | KIND | DATE | |
|----|--|----------------|----------------------------------|------|
| U. | S 2003199046 S 6689888 S 2003-370793 | A1 B2 A1 | 20031023 20040210 20030220 | (10) |

NUMBER DATE

PRIORITY INFORMATION:

US 2002-360286P 20020227 (60)

DOCUMENT TYPE: FILE SEGMENT:

Utility APPLICATION

LEGAL REPRESENTATIVE:

PFIZER INC., PATENT DEPARTMENT, MS8260-1611, EASTERN

POINT ROAD, GROTON, CT, 06340

NUMBER OF CLAIMS:

11

EXEMPLARY CLAIM: LINE COUNT:

714

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides processes useful in the preparation of certain β.sub.3-adrenergic receptor agonists of the structural formula ##STR1##

the pharmaceutically acceptable salts thereof, and the hydrates of said pharmaceutically acceptable salts, wherein HET is as described herein. The invention further provides intermediates useful in the preparation of such agonists, and processes useful in the production of such intermediates.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 5 OF 15 USPATFULL on STN

ACCESSION NUMBER:

INVENTOR(S):

2003:238528 USPATFULL

TITLE:

Beta3 adrenergic receptor agonist crystal forms,

processes for the production thereof, and uses thereof Krzyaniak, Joseph F., Pawcatuck, CT, UNITED STATES Lafontaine, Jennifer A., San Diego, CA, UNITED STATES

PATENT ASSIGNEE(S): Pfizer Inc. (U.S. corporation)

DATE NUMBER ______

PRIORITY INFORMATION: US 2002-360252P 20020227 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

FILE SEGMENT:

LEGAL REPRESENTATIVE: PFIZER INC., PATENT DEPARTMENT, MS8260-1611, EASTERN POINT ROAD, GROTON, CT, 06340

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

12

1002

TITNE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides the tosylate salt of (R)-2-(2-(4-oxazol-4-invention))yl-phenoxy)-ethylamino)-1-pyridin-3-yl-ethanol, the monohydrate of such salt, processes useful in the preparation of such salt and such monohydrate, pharmaceutical compositions comprising such salt, or such monohydrate, methods of treating β .sub.3-adrenergic receptor-mediated diseases, conditions, and disorders in a mammal using such salt, such monohydrate, or such pharmaceutical compositions; and methods of increasing the content of lean meat in edible animals using such salt, such monohydrate, or such pharmaceutical compositions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 6 OF 15 USPATFULL on STN

INVENTOR(S):

ACCESSION NUMBER: 2003:166812 USPATFULL

TITLE:

Process for preparing substituted pyridines

Dow, Robert L., Waterford, CT, UNITED STATES

Schneider, Steven R., Stonington, CT, UNITED STATES

NUMBER KIND DATE _____ US 2003114670 A1 20030619 US 6670480 B2 20031230 US 2002-317720 A1 20021212 (10) PATENT INFORMATION: APPLICATION INFO.:

RELATED APPLN. INFO.: Division of Ser. No. US 2001-820137, filed on 28 Mar

2001, GRANTED, Pat. No. US 6518431

NUMBER DATE

PRIORITY INFORMATION:

US 2000-193772P 20000331 (60)

DOCUMENT TYPE:

Utility APPLICATION

FILE SEGMENT:

LEGAL REPRESENTATIVE: PFIZER INC., PATENT DEPARTMENT, MS8260-1611, EASTERN

POINT ROAD, GROTON, CT, 06340

NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1

2376 LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

A process for preparing a compound of the formula ##STR1##

wherein n, R.sup.1, R.sup.2, R.sup.3 and X are as defined above, used as an intermediate in the synthesis of β -adrenergic receptor agonists.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 7 OF 15 USPATFULL on STN

ACCESSION NUMBER:

2003:153493 USPATFULL

TITLE:

Novel phenylheteroalkylamine derivatives

INVENTOR(S):

Birkinshaw, Tim, Leicestershire, UNITED KINGDOM Cheshire, David, Leicestershire, UNITED KINGDOM Mete, Antonio, Leicestershire, UNITED KINGDOM

| | NUMBER | KIND | DATE | |
|--------------------|--|----------------|--|------|
| APPLICATION INFO.: | US 2003105161 US 6743939 US 2002-204815 WO 2001-SE370 | A1 B2 A1 | 20030605 20040601 20020822 20010220 | (10) |

NUMBER DATE

PRIORITY INFORMATION:

GB 2000-4149

20000223

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

FISH & RICHARDSON PC, 225 FRANKLIN ST, BOSTON, MA,

02110

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

25

EXEMPLARY CI

2420

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB There are provided novel compounds of formula (I), ##STR1##

wherein R.sup.1, R.sup.2, X, Y, V, W and Z are as defined in the specification, and pharmaceutically acceptable salts thereof, and enantiomers and racemates thereof; together with processes for their preparation, compositions containing them and their use in therapy. The compounds are inhibitors of nitric oxide synthase and are thereby particularly useful in the treatment or prophylaxis of inflammatory disease and pain.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 8 OF 15 USPATFULL on STN

ACCESSION NUMBER:

2002:236049 USPATFULL

TITLE:

Beta3 agonists and uses thereof

INVENTOR(S): Dow, Robert L., Waterford, CT, UNITED STATES
Paight, Ernest S., Pawcatuck, CT, UNITED STATES

| | NUMBER | KIND | DATE | |
|---------------------|---------------|------|----------|------|
| PATENT INFORMATION: | US 2002128247 | A1 | 20020912 | (10) |
| APPLICATION INFO.: | US 2002-86588 | A1 | 20020228 | |

NUMBER DATE

PRIORITY INFORMATION:

DOCUMENT TYPE:

775 2001 272001

US 2001-272681P 20010301 (60)

FILE SEGMENT:

Utility

LEGAL REPRESENTATIVE:

APPLICATION

Gregg C. Benson, Pfizer Inc., Patent Department, MS 4159, Eastern Point Road, Groton, CT, 06340

NUMBER OF CLAIMS:

69

EXEMPLARY CLAIM:

LINE COUNT:

3087

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Sulfamide compounds having formula (I) are described as well as their use in the treatment of diseases dependent on the signaling pathways associated with β -adrenergic receptors, such as obesity, diabetes, hypertension, gastrointestinal hypo- or hyper-motility and

cardiovascular diseases. ##STR1##

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 9 OF 15 USPATFULL on STN

ACCESSION NUMBER: 2002:149318 USPATFULL

TITLE: INVENTOR(S): Process for preparing substituted pyridines

Dow, Robert L., Waterford, CT, UNITED STATES

Schneider, Steven R., Stonington, CT, UNITED STATES

NUMBER KIND DATE PATENT INFORMATION: US 2002077478 A1 20020620 US 6518431 B2 20030211 APPLICATION INFO.: US 2001-820137 A1 20010328 (9) APPLICATION INFO .:

> NUMBER DATE ______

PRIORITY INFORMATION: US 2000-193772P 20000331 (60)

DOCUMENT TYPE: Utility

APPLICATION

FILE SEGMENT: LEGAL REPRESENTATIVE:

Gregg C. Benson, Pfizer Inc., Patent Department, MS

4159, Eastern Point Road, Groton, CT, 06340

NUMBER OF CLAIMS:

47

EXEMPLARY CLAIM:

LINE COUNT:

2383

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

A process for preparing a compound of the formula ##STR1##

wherein n, R.sup.1, R.sup.2, R.sup.3 and X are as defined above, used as an intermediate in the synthesis of P-adrenergic receptor agonists.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 10 OF 15 USPATFULL on STN

ACCESSION NUMBER:

2002:99491 USPATFULL

TITLE:

Bita3 adrenergic receptor agonists and uses thereof

INVENTOR(S):

Day, Robert F., Groton, CT, UNITED STATES

Lafontaine, Jennifer A., Mystic, CT, UNITED STATES

NUMBER KIND DATE _____ -----US 2002052392 A1 20020502 US 6566377 B2 20030520 US 2001-981551 A1 20011017 (9) PATENT INFORMATION: APPLICATION INFO .:

> NUMBER DATE _____

PRIORITY INFORMATION:

US 2000-242274P 20001020 (60)

DOCUMENT TYPE: FILE SEGMENT:

Utility APPLICATION

LEGAL REPRESENTATIVE:

Gregg C. Benson, Pfizer Inc., Patent Department, MS

4159, Eastern Point Road, Groton, CT, 06340

NUMBER OF CLAIMS: EXEMPLARY CLAIM: LINE COUNT: 3410

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The instant invention provides β .sub.3 adrenergic receptor agonists of structural Formula (I), ##STR1##

the stereoisomers and prodrugs thereof, and the pharmaceutically acceptable salts of the compounds, stereoisomers and prodrugs, wherein Ar, R, R.sub.1, R.sub.2, R.sub.3, R.sub.4, R.sub.5, R.sub.6, R.sub.7, R.sub.8, X, and Y, are as defined herein.

The invention further provides intermediates useful in the preparation of the compounds of Formula (I), to combinations of the compounds of Formula (I), the stereoisomers and prodrugs thereof, and the pharmaceutically acceptable salts of the compounds, stereoisomers and prodrugs, with anti-obesity agents; to pharmaceutical compositions comprising the compounds of Formula (I), the stereoisomers and prodrugs thereof, and the pharmaceutically acceptable salts of the compounds, stereoisomers and prodrugs, or pharmaceutical compositions comprising the compounds of Formula (I), the stereoisomers and prodrugs thereof, and the pharmaceutically acceptable salts of the compounds, stereoisomers and prodrugs, and anti-obesity agents; and methods of treating β .sub.3 adrenergic receptor-mediated diseases, conditions, or disorders in a mammal which methods comprise administering to the mammal an effective amount of a compound of Formula (I), a stereoisomer or prodrug thereof, or a pharmaceutical composition thereof; or a combination of a compound of Formula (I), a pharmaceutically acceptable salt of the compound, stereoisomer, or prodrug, and an anti-obesity agent, or a pharmaceutical composition thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 11 OF 15 USPATFULL on STN

ACCESSION NUMBER:

2000:128489 USPATFULL

TITLE:

Process and intermediates for a β .sub.3

-adrenergic receptor agonist

INVENTOR(S):

DeVries, Keith M., Chester, CT, United States Raggon, Jeffrey W., Uncasville, CT, United States Shanker, Ravi M., Groton, CT, United States Urban, Frank J., Waterford, CT, United States Vanderplas, Brian C., Old Lyme, CT, United States Pfizer Inc., New York, NY, United States (U.S.

PATENT ASSIGNEE(S):

corporation)

NUMBER KIND DATE US 6124457 PATENT INFORMATION: 20000926 20000120 (9) US 2000-488245

APPLICATION INFO .: RELATED APPLN. INFO.:

Division of Ser. No. US 1999-408998, filed on 29 Sep

1999

NUMBER DATE US 1999-145460P 19990723 (60) PRIORITY INFORMATION: US 1998-104375P 19981015 (60) DOCUMENT TYPE: Utility FILE SEGMENT: Granted PRIMARY EXAMINER: Rotman, Alan L. ASSISTANT EXAMINER: Desai, Rita Richardson, Peter C., Benson, Gregg C., Ronau, Robert LEGAL REPRESENTATIVE: т. 10 NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1 1126 LINE COUNT: CAS INDEXING IS AVAILABLE FOR THIS PATENT. The instant invention relates to intermediates of Formula II, ##STR1## wherein R.sup.1, R.sup.2 and R.sup.3 are as defined in the specification, and to processes for preparing such intermediates. This invention also relates to processes for preparing compounds of Formula III, ##STR2## and enantiomers thereof, wherein R.sup.2, R.sup.3 and R.sup.4 are as defined in the specification. Compounds of Formula II and Formula III are intermediates in the preparation of a potent eta.sub.3 adrenergic receptor agonist. The instant invention also relates to processes for preparing the β .sub.3 adrenergic receptor agonist using the compounds of Formula II and Formula III. CAS INDEXING IS AVAILABLE FOR THIS PATENT. ANSWER 12 OF 15 USPATFULL on STN ACCESSION NUMBER: 2000:121527 USPATFULL 4-substituted quinoline derivatives having fungicidal TITLE: activity Daeuble, John, 2783 Wooded Glen Ct., Indianapolis, IN, INVENTOR(S): United States 46268 Davis, L. Navell, 10076 N. 700E, Morristown, IN, United States 46161 Hellwig, Karin, 4778 Stansbury La., Indianapolis, IN, United States 46254 Kirby, Neil, 13911 Stonemill Cir., Carmel, IN, United States 46032 Parker, Marshall H., 771 Arrowwood Dr., Carmel, IN, United States 46033 Pieczko, Mary, 5323 Holly Springs W., Indianapolis, IN, United States 46254 Thomason, Lori K., 1756 Shorter Dr., Indianapolis, IN, United States 46214 NUMBER KIND DATE US 6117884 20000912 US 1997-904282 19970731 (8) PATENT INFORMATION: US 1997-904282 APPLICATION INFO .: Utility DOCUMENT TYPE: Granted FILE SEGMENT: Dees, Jose' G. Qozi, Sabiha N. PRIMARY EXAMINER: ASSISTANT EXAMINER: Corvin, Carl D., Stuart, Donald R. LEGAL REPRESENTATIVE:

Searcher : Shears 571-272-2528

13

NUMBER OF CLAIMS:

EXEMPLARY CLAIM: 1
LINE COUNT: 741

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides compounds of formula (1) ##STR1## wherein the substituents are described in the specification. The compounds of formula (1) are plant fungicides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 13 OF 15 USPATFULL on STN

ACCESSION NUMBER: 2000:92097 USPATFULL

TITLE: Process and intermediates for a β .sub.3

-adrenergic receptor agonist

INVENTOR(S): DeVries, Keith M., Chester, CT, United States

Raggon, Jeffrey W., Uncasville, CT, United States Shanker, Ravi M., Groton, CT, United States

Urban, Frank J., Waterford, CT, United States
Vanderplas, Brian C., Old Lyme, CT, United States

PATENT ASSIGNEE(S): Pfizer Inc., New York, NY, United States (U.S.

corporation)

NUMBER DATE

PRIORITY INFORMATION: US 1998-104375P 19981015 (60)

US 1999-145460P 19990723 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Rotman, Alan L. ASSISTANT EXAMINER: Desai, Rita

LEGAL REPRESENTATIVE: Richardson, Peter C., Benson, Gregg C., Ronau, Robert

т.

NUMBER OF CLAIMS: 10
EXEMPLARY CLAIM: 1
LINE COUNT: 1124

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The instant invention relates to intermediates of Formula II, ##STR1## wherein R.sup.1, R.sup.2 and R.sup.3 are as defined in the specification, and to processes for preparing such intermediates. This invention also relates to processes for preparing compounds of Formula III, ##STR2## and enantiomers thereof, wherein R.sup.2, R.sup.3 and R.sup.4 are as defined in the specification. Compounds of Formula II and Formula III are intermediates in the preparation of a potent β .sub.3 adrenergic receptor agonist. The instant invention also relates to processes for preparing the β .sub.3 adrenergic receptor agonist using the compounds of Formula II and Formula III.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 14 OF 15 USPATFULL on STN

ACCESSION NUMBER: 1998:1798 USPATFULL

TITLE: Substituted sulfonamides as selective β -3 agonists

INVENTOR(S):

for the treatment of diabetes and obesity Fisher, Michael H., Ringoes, NJ, United States

Naylor, Elizabeth M., Scotch Plains, NJ, United States

Parmee, Emma R., Hoboken, NJ, United States Shih, Thomas, Edison, NJ, United States Ok, Hyun, Edison, NJ, United States

Weber, Ann E., Scotch Plains, NJ, United States

PATENT ASSIGNEE(S): Merck & Co., Inc., Rahway, NJ, United States (U.S.

corporation)

NUMBER KIND DATE

PATENT INFORMATION: APPLICATION INFO.:

US 5705515 19980106 US 1996-684901 19960725 (8)

RELATED APPLN. INFO:: Continuation-in-part of Ser. No. US 1995-445630, filed on 22 May 1995, now patented, Pat. No. US 5561142 which

is a continuation-in-part of Ser. No. US 1995-404565, filed on 21 Mar 1995, now abandoned which is a continuation-in-part of Ser. No. US 1994-233166, filed

on 26 Apr 1994, now abandoned

DOCUMENT TYPE:

Utility Granted

FILE SEGMENT: Granted
PRIMARY EXAMINER: Davis, Zinna Northington

LEGAL REPRESENTATIVE: Yang, Mollie M., Rose, David L.

NUMBER OF CLAIMS: EXEMPLARY CLAIM: LINE COUNT:

1 1948

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Substituted sulfonamides are selective $\beta.sub.3$ adrenergic receptor agonists with very little $\beta.sub.1$ and $\beta.sub.2$ adrenergic receptor activity and as such the compounds are capable of increasing lipolysis and energy expenditure in cells. The compounds thus have potent activity in the treatment of Type II diabetes and obesity. The compounds can also be used to lower triglyceride levels and cholesterol levels or raise high density lipoprotein levels or to decrease gut motility. In addition, the compounds can be used to reduced neurogenic inflammation or as antidepressant agents. The compounds are prepared by coupling an aminoalkylphenyl-sulfonamide with an appropriately substituted epoxide. Compositions and methods for the use of the compounds in the treatment of diabetes and obesity and for lowering triglyceride levels and cholesterol levels or raising high density lipoprotein levels or for increasing gut motility are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 15 OF 15 USPATFULL on STN

ACCESSION NUMBER:

93:82865 USPATFULL

Searcher :

TITLE:

Angiotensin II receptor antagonists

INVENTOR(S):

Winn, Martin, Deerfield, IL, United States
De, Biswanath, Buffalo Grove, IL, United States
Zydowsky, Thomas M., Waukegan, IL, United States
Kerkman, Daniel J., Lake Villa, IL, United States
DeBernardis, John F., Lindenhurst, IL, United States
Rosenberg, Saul H., Libertyville, IL, United States
Shiosaki, Kazumi, Libertyville, IL, United States

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Basha, Fatima Z., Lake Forest, IL, United States

Shears 571-272-2528

Tasker, Andrew S., Lindenhurst, IL, United States von Geldern, Thomas W., Richmond, IL, United States Kester, Jeffrey A., Deerfield, IL, United States

Boyd, Steven, Mundelein, IL, United States Yamamoto, Diane M., Gurnee, IL, United States Fung, Anthony K. L., Gurnee, IL, United States

PATENT ASSIGNEE(S):

Abbott Laboratories, Abbott Park, IL, United States

(U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION:

US 5250548 19931005

APPLICATION INFO.:

US 1992-844351 19920302

RELATED APPLN. INFO.:

Continuation-in-part of Ser. No. US 1991-744241, filed on 15 Aug 1991 which is a continuation-in-part of Ser. No. US 1990-580400, filed on 10 Sep 1990, now abandoned

DOCUMENT TYPE:

Utility Granted

FILE SEGMENT: PRIMARY EXAMINER: ASSISTANT EXAMINER:

Ford, John M. Gupta, Y. N.

LEGAL REPRESENTATIVE:

Crowley, Steven R.

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

16 1

LINE COUNT:

7545

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Compounds are disclosed having the formula: ##STR1## The compounds of

the invention are angiotensin II receptor antagonists.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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